

REMARKS

The Office Action objects to the specification and rejects claims 1-19, 34, and 36-39.

The Office Action notes that claims 20-33, 35, and 40-42 are in condition for allowance.

The specification and claims have been amended. Claim 6 has been cancelled without prejudice or disclaimer. Accordingly, Claims 1-5 and 7-42 are pending and reconsideration of claims 1-5, 7-19, 34, and 36-39 is respectfully requested.

Objection to the Specification

The Office Action objects to paragraph [0042] due to a typographical error. Applicants amend paragraph [0042] in accordance with the Examiner's suggest to obviate the objection. Accordingly, withdrawal of the objection is respectfully requested.

Rejection of claims 1-4, 6, 34, and 36 under 35 U.S.C. §103(a)

The Office Action rejects claims 1-4, 6, 34, and 36 under 35 U.S.C. §103 as being unpatentable over admitted prior art as described on pages 1-3 of the specification (hereinafter referred to as "admitted prior art") in view of U.S. Patent 6,221,136 issued to Liu et al. (herein after referred to as "Liu") or U.S. Patent 6,585,803 issued to Chang et al. (hereinafter referred to as "Chang"). This rejection is respectfully traversed.

Inorganic or synthetic fiber filter formed of natural fiber, glass fiber, or various synthetic resin fibers may be damaged under severe conditions and involves some risks as discussed in paragraph [0004] of the specification. The metal fibers of the present invention solve the problems of the admitted prior art.

The admitted prior art, Liu, and Chang, taken separately or in combination, do not disclose, teach, or suggest at least, "the metal fibers of the metal filter having gaps sufficiently narrow therebetween to provide electrical force and mechanical force to collect the dust particles onto the metal filter," as recited in claim 1.

Liu and Chang are directed toward electrostatic precipitators to remove particles from a gaseous stream, and the admitted prior art is directed toward removing dust particles from air. However, Lou, Chang, and the admitted prior art only rely on an electrical force to remove particles. The admitted prior art, Liu, and Chang, taken separately or in combination, do not disclose, teach or suggest a metal filter providing both electrical force and mechanical force to collect dust particles. Therefore, for at least these reasons, claim 1 patentably distinguishes from the cited references.

Claims 2-4 depend from claim 1 and include all of the features of that claim plus additional features, which not taught or suggested by the cited references. Therefore, for at least these reasons claims 2-4 also patentably distinguish over the cited references.

Similarly, the admitted prior art, Liu, and Chang, taken separately or in combination, do not disclose teach or suggest at least “the plurality of metal fibers having gaps sufficiently narrow therebetween to collect the dust particles using mechanical force, regardless of whether the ionizer is operating properly,” as recited in claim 34. Therefore, for at least these reasons, claim 34 patentably distinguishes from the cited references.

Similarly, the admitted prior art, Liu, and Chang, taken separately or in combination, do not disclose teach or suggest at least “the metal filter comprises a plurality of metal fibers with gaps sufficiently narrow therebetween to collect the dust particles using mechanical force, regardless of whether the ionizer is operating properly,” as recited in claim 36. Therefore, for at least these reasons, claim 36 patentably distinguishes from the cited references.

Rejection of claim 5 under 35 U.S.C. §103(a)

The Office Action rejects claim 5 under 35 U.S.C. §103 as being unpatentable over admitted prior art in view of Liu and Chang. This rejection is respectfully traversed.

Claim 5 depends from claim 1 and includes all of the features of that claim plus additional features, which not taught or suggested by the cited references. Therefore, for at least these reasons claim 5 also patentably distinguishes over the cited references.

Rejection of claims 7-19 and 37-39 under 35 U.S.C. §103(a)

The Office Action rejects claims 7-19 and 37-39 under 35 U.S.C. §103 as being unpatentable over admitted prior art in view of Liu or Chang, and further in view of U.S. Patent 5,582,632 issued to Nohr et al. (hereinafter referred to as “Nohr”). This rejection is respectfully traversed.

With respect to claim 9, Liu, Chang, and Nohr do not disclose, teach, or suggest at least, “the metal filter is formed as a sheet by compressing open the metal fibers.” For example, Chang’s sintered stainless steel filter including fibers is entirely different from a “metal filter is formed as a sheet by compressing open the metal fibers.”

In addition, Liu, Chang, and Nohr do not disclose, teach, or suggest providing sterilizing operations and removing VOCs in accordance with the kind of metal.

Nohr does not cure the deficiencies of the admitted prior art, Liu, and Chang. Claims 7-19 and 37-39 depend from claim 1 and include all of the features of that claim plus additional features, which not taught or suggested by the cited references.

With respect to claim 9, Liu, Chang, and Nohr do not disclose, teach, or suggest at least, "the metal filter is formed as a sheet by compressing open the metal fibers." For example, Chang's sintered stainless steel filter including fibers is entirely different from a "metal filter is formed as a sheet by compressing open the metal fibers."

In addition, Liu, Chang, and Nohr do not disclose, teach, or suggest providing sterilizing operations and removing VOCs in accordance with the kind of metal.

Therefore, for at least these reasons claims 7-19 and 37-39 also patentably distinguish over the cited references.

Summary

Claims 1-5 and 7-42 are pending and under consideration. It is respectfully submitted that none of the references taken separately or in combination disclose the present claimed invention.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: July 25th 2005

By: 
Gene M. Garner, II
Registration No. 34,172

1201 New York Avenue, NW, Suite 700
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501